PRICE HENEVELD

616 957 8196

P.02

Applicant

G. Douglas Antuma

Appln. No.

09/483.542

Page

2

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1 - 18. (Canceled)

19. (Currently Amended) A roof truss volume detailing system for volume detailing a system of roof trusses that allows for the consideration of the positioning of various structural and non-structural components, comprising:

a processor;

a memory subsystem coupled to the processor, the memory subsystem storing information;

an input device coupled to the processor, the input device receiving input from a user; and

volume detailing code for causing the processor to perform the steps of:

providing a representation of a three dimensional roof truss volume, wherein the three dimensional roof truss volume models a system of roof trusses;

positioning a representation of a three dimensional component at a desired location relative to the three dimensional roof truss volume; [[and]]

sectioning the three dimensional roof truss volume at a <u>plurality of points</u> of interest to provide [[a]] two dimensional roof truss profiles that <u>includes include</u> a component profile if the three dimensional component extends through the points of interest[[.]]; and

designing roof trusses based upon the roof truss profiles.

Applicant

SEP-03-2004 14:49

G. Douglas Antuma

Appln. No.

09/483,542

Page

20. (Currently Amended) The system of claim 19, further including the step of:

placing a plurality of additional component profiles within the roof truss profiles at the points of interest such that the additional component profiles do not interfere with one another or interfere with the component profile of the three dimensional component.

- 21. (Original) The system of claim 19, wherein the roof truss volume and the three dimensional component are selected from a group of predetermined shapes.
- 22. (Original) The system of claim 19, wherein an outer surface of the roof truss volume is defined by at least an outer surface of a bottom chord and an outer surface of a plurality of top chords of a roof truss that is part of the system of roof trusses.
- 23. (Currently Amended) The system of claim 20, wherein the positioning a representation of a three dimensional component at a desired location in relative to the three dimensional roof truss volume step further includes the step of:

subtracting the three dimensional component from the three dimensional roof truss volume.

- 24. (Original) The system of claim 19, wherein the three dimensional component is an air duct associated with a heating, ventilating and air conditioning (HVAC) system.
- 25. (Original) The system of claim 19, wherein the three dimensional component is a cat walk.
- 26. (Currently Amended) The system of claim 19 20, wherein the placing a plurality of additional component profiles within the roof truss profiles at the points of interest such

SEP-03-2004 14:49 PRICE HENEUELD 616 957 8196

P.04

Applicant

G. Douglas Antuma

Appln. No.

09/483,542

Page

4

that the additional component profiles do not interfere with one another or interfere with the component profile of the three dimensional component step further includes the step of:

verifying that the placement of structural members is such that the roof trusses will meet design criteria.